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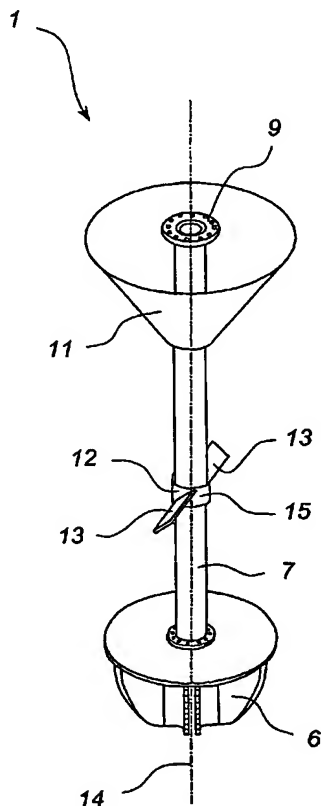
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(54) Title: AUXILIARY AGITATOR FOR A FLOTATION DEVICE



(57) Abstract: The invention provides an agitator (1) is disposed to agitate slurry within a flotation tank (2). The agitator includes a rotor (6) mounted on one end of a centrally disposed drive shaft (7) extending axially downwardly into the tank and driven by a motor (8) and associated gearbox (not shown). The other end of the drive shaft includes a mounting flange (9) adapted for connection to the motor. A stator (10) is also provided around the rotor. A froth deflection cone (11) extends around the drive shaft adjacent the top of the tank. The deflection cone is oriented such that its smallest diameter is located at its lowermost end nearest the rotor (6). An auxiliary agitator (12) is connected to the drive shaft at a position substantially midway between the underside of the deflection cone (11) and the top of the rotor (6), as shown in Figure 1 and Figure 2. The auxiliary agitator (12) includes agitation blades (13) extending radially outwardly from diametrically opposite sides of the shaft (7). Each blade (13) intersects the shaft at an angle of incidence of around 45 degrees to the shaft axis (14).



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